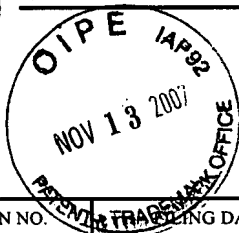




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APPLICATION NO.	FILED DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/827,124      04/19/2004      Young Sun Lee      2312

43337      7590      10/30/2007  
YOUNG SUN LEE  
500 SOUTH CATALINA STREET #310  
LOS ANGELES, CA 90020

EXAMINER
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BLAIR, KILE O

ART UNIT	PAPER NUMBER
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4114

MAIL DATE	DELIVERY MODE
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10/30/2007      PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

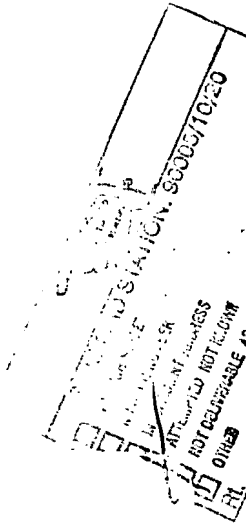
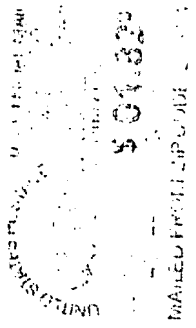
The time period for reply, if any, is set in the attached communication.

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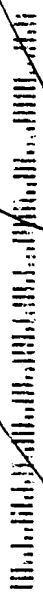
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LOS ANGELES CA 90005-2011



<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/827,124	LEE, YOUNG SUN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kile O. Blair	4114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/19/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:

*In the first paragraph of the Background of the Invention:* The separate tone control should be pluralized. In addition, connected component should be pluralized where it is stated "front panel for each of the connected component." Further, the word "component's" in the sentence "Each component plug-in is situated straight behind each of the component's front panel strip" should be plural possessive (i.e. components').

*In the second paragraph of the Background of the Invention:* The sentences "So the user can easily identify the correct plug-ins from all direction", "So the user steps over to the receiver and turns up the bass button", and "But when watching TV news and hearing the TV anchor's human voice, big bass sound makes the voice unnatural" are incomplete.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claims are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly

and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claims must be in one sentence form only (regarding claims 1, 5 and 6). Note the format of the claims in the patent Oki et al. (US Pat. No. 4,972,489) cited. In addition, regarding claims 3 and 4, (treble and bass) is indefinite language. Further, the terms "straight forwardly" (regarding claim 5) and "the not slanted, straight up area" (regarding claim 7) are indefinite language. Claim 2 is rejected for incorporating the above errors from its respective parent claim by dependency.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over "TASCAM TEAC Professional Division M-08 Compact Mixer Owner's manual", April 19, 2003, 16 pages (hereinafter as Tascam (M-08)).

Regarding claim 1, Tascam (M-08) teaches a machine for Audio/Video Stereo Receiver with Multiple Tone Controls (mixing board, Fig. E7, pg 8) that has features of: (a) Front panel that includes a number of component strips (the rows of controls corresponding to different component to be connected, see P2, Fig. E7), in addition to the traditional functions such master volume control (see 21, Fig. E7), balance control (see 9, Fig. E7) and system on/off switch (Tascam (M-08), Fig. E8, 22) and (b) Back panel that is partly slanted. (the back panel is slanted, Fig. E16). It is noted that Tascam (M-08) discloses the claimed inventions except for the feature of the power switch being located on the front panel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to locate the power switch on the front panel, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japiske, 86 USPQ 70.

Regarding claim 7, Tascam (M-08) teaches a machine for Audio/Video Stereo Receiver with Multiple Tone Controls as claimed in claim 1 wherein the not slanted, straight up area has AC power cord outlet (Tascam (M-08), Fig. E8, P3).

6. Claims 2-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over "TASCAM TEAC Professional Division M-08 Compact Mixer Owner's manual",

April 19, 2003, 16 pages (hereinafter as Tascam (M-08)) in view of Classic Audio, <http://www.classic-audio.com/marantz/pics/2600-b.jpg>, July 17, 2002, 1 page.

Regarding claim 2, Tascam (M-08) in view of Classicaudio.com teaches a machine for Audio/Video Stereo Receiver with Multiple Tone Controls as claimed in claim 1 wherein the front panel comprises specifically of master volume control (Tascam (M-08), Fig. E7, 21), balance control (Tascam (M-08), Fig. E7, 9), system power switch (Tascam (M-08), Fig. E8, 22), AM/FM radio strip (item 1 which is the entire front panel of the MARANTZ receiver where front panel is an AM/FM radio strip. See Classic Audio, Fig. A, 1), and multiple columns of different component strips (strips 1-12 where P2 is strip 1, Tascam (M-08), Fig. E7, P2). It would have been obvious for one of ordinary skill in the art to combine the AM/FM features of the MARANTZ receiver of Classic Audio with the machine for Audio/Video Stereo Receiver with Multiple Tone Controls of Tascam (M-08). The MARANTZ receiver could have been connected (from the output, {Classic Audio} to one of the components strips of the mixing board of Tascam (M-08) for the purpose of outputting AM/FM radio audio signals to the mixing board, a configuration that is readily apparent and well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the AM/FM radio strip of Classic Audio integral to the mixing board of Tascam (M-08), since it has been held that making an old device integral without producing any new or unexpected result involves only routine skill in the art. *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965).

Regarding claim 3, Tascam (M-08) in view of Classicaudio.com teaches a machine for Audio/Video Stereo Receiver with Multiple Tone Controls as claimed in claim 2 wherein the AM/FM radio strip comprises of analog or digital display (Classic Audio, Fig. A, 11), tuning control (Classic Audio, Fig. A, 12), AM radio selection button (Classic Audio, Fig. A, 10), FM radio selection button (Classic Audio, Fig. A, 10), tone control buttons (treble and bass) (Classic Audio, Fig. A, 5, 6, and 7) and AM/FM radio strip on/off switch (Classic Audio, Fig. A, 2).

Regarding claim 4, Tascam (M-08) in view of Classicaudio.com teaches a machine for Audio/Video Stereo Receiver with Multiple Tone Controls as claimed in claim 2 wherein each of the multiple columns of different component strips has its own tone control buttons (treble and bass) (EQ high 3 and low4 buttons; Tascam (M-08), Fig. E7, 3 and 4) and on/off switch (mute button 10; Tascam (M-08), Fig. E7, 10).

Regarding claim 6, Tascam (M-08) in view of Classicaudio.com teaches a machine for Audio/Video Stereo Receiver with Multiple Tone Controls as claimed in claims 3 and 4 wherein on/off switch of each of the strips does not function exclusively of each other. If two (2) or more strip switches are pressed on simultaneously, sound signals from the pressed on strips are all transmitted to the receiver's main circuitry and to the loud speakers. (It is well known in the art that the mute buttons 10, when toggled to leave the component strip on (not muted), will allow more than one component to be sent to the system output. Tascam (M-08), Fig. E7, 10).



7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over "TASCAM TEAC Professional Division M-08 Compact Mixer Owner's manual", April 19, 2003, 16 pages (hereinafter as Tascam (M-08)) in view of Minidisc, <http://www.minidisc.org/images/tascam-564-mid.gif>, June 6, 2002, 1 page.

Tascam (M-08) in view of Minidisc teaches a machine for Audio/Video Stereo Receiver with Multiple Tone Controls as claimed in claim 1 wherein the slanted area of the back panel has multiple columns of component connection plug-ins (slanted back panel with component input strips, Minidisc, Fig. C, 13, 14, and 15). Each component plug-in in the back panel is linked to the component strip straight forwardly located in the front panel (the component input strips 13, 14, and 15 are electrically connected to the component strips 16, 17, and 18 on front panel respectively, Minidisc, Fig. C, 13-18). It would have been obvious for one of ordinary skill in the art to combine the feature of the component input strips located on the back slanted portion of Minidisc with the device of Tascam (M-08) since it is a rearranging of parts.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Van Slooten (US Pat. No. 1,209,397) teaches a combination radio receiver and phonograph. It is noted that a phonograph is analogous to any analog or digital media player. Mukai (US Pat. No. D243,794) teaches a receiver with a radio tuner and control knobs. Oki et al. (US Pat. No. 4,972,489) teaches an

automobile audio system. Ebay teaches the features of the front interface of the Model 2600 Marantz Stereo Receiver.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kile O. Blair whose telephone number is (571) 270-3544. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe H. Cheng can be reached on (571) 272-4433. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joe H Cheng/  
Supervisory Patent Examiner, Art Unit 4114

KB

<b>Notice of References Cited</b>	Application/Control No. 10/827,124	Applicant(s)/Patent Under Reexamination LEE, YOUNG SUN	
	Examiner Kile O. Blair	Art Unit 4114	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-D243,794 S	03-1977	Mukai, Hitoshi	D14/198
*	B	US-2,111,711 A	03-1938	SLOOTEN JACOB VAN	369/6
*	C	US-4,972,489 A	11-1990	Oki et al.	381/97
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Tascam, M-08 Owner's Manual, <a href="http://www.tascam.com/pdf/M-08_manual.pdf">www.tascam.com/pdf/M-08_manual.pdf</a> (published on April 19, 2003), pg 1-16
	V	Minidisc.org, <a href="http://www.minidisc.org/images/tascam_564_mid.gif">www.minidisc.org/images/tascam_564_mid.gif</a> (published on June 6, 2002)
	W	Classic Audio, <a href="http://www.classic-audio.com/marantz/pics/2600_b.jpg">www.classic-audio.com/marantz/pics/2600_b.jpg</a> (published on July 17, 2002)
	X	Ebay, <a href="http://stores.ebay.at/BestVintageAudio">http://stores.ebay.at/BestVintageAudio</a> (published on October 26, 2007)

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

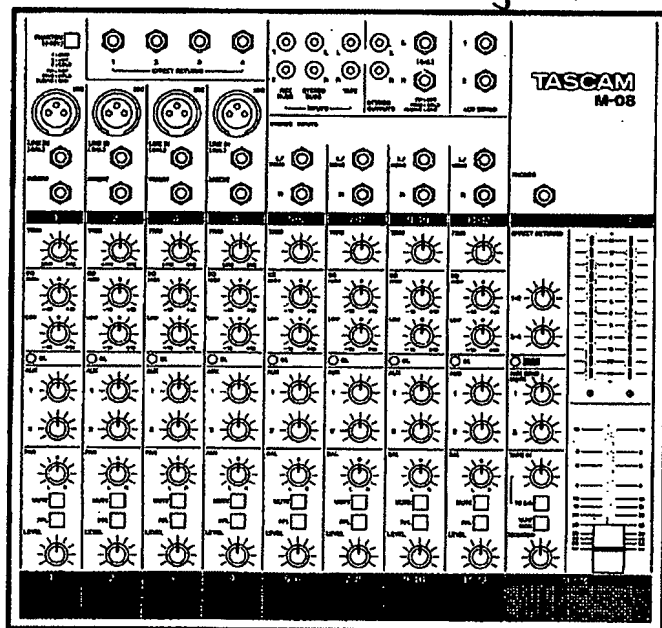
# TASCAM

TEAC Professional Division

# M-08

Compact Mixer

Fig. E1



**OWNER'S MANUAL**

9101406800

## Important Safety Precautions



**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This appliance has a serial number located on the rear panel. Please record the model number and serial number and retain them for your records.  
Model number \_\_\_\_\_  
Serial number \_\_\_\_\_

**WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

### IMPORTANT (for U.K. Customers)

**DO NOT cut off the mains plug from this equipment.** If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power points, then obtain an appropriate safety approved extension lead or consult your dealer.

If nonetheless the mains plug is cut off, remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If this product is not provided with a mains plug, or one has to be fitted, then follow the instructions given below :

**IMPORTANT: DO NOT** make any connection to the larger terminal which is marked with the letter E or by the safety earth symbol  $\perp$  or coloured GREEN or GREEN-and-YELLOW.

The wires in the mains lead on this product are coloured in accordance with the following code :

**BLUE : NEUTRAL**  
**BROWN : LIVE**

As these colours may not correspond with the coloured marking identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

When replacing the fuse only a correctly rated approved type should be used and be sure to re-fit the fuse cover.

**IF IN DOUBT – CONSULT A COMPETENT ELECTRICIAN.**

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## Safety Instructions

### CAUTION:

- Read all of these instructions.
- Save these instructions for later use.
- Follow all Warnings and Instructions marked on the audio equipment.

- 1) **Read Instructions** — All the safety and operating instructions should be read before the product is operated.
- 2) **Retain Instructions** — The safety and operating instructions should be retained for future reference.
- 3) **Heed Warnings** — All warnings on the product and in the operating instructions should be adhered to.
- 4) **Follow instructions** — All operating and use instructions should be followed.
- 5) **Cleaning** — Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 6) **Attachments** — Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- 7) **Water and Moisture** — Do not use this product near water — for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
- 8) **Accessories** — Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
- 9) A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



10) **Ventilation** — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11) **Power Sources** — This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

12) **Grounding or Polarization** — This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

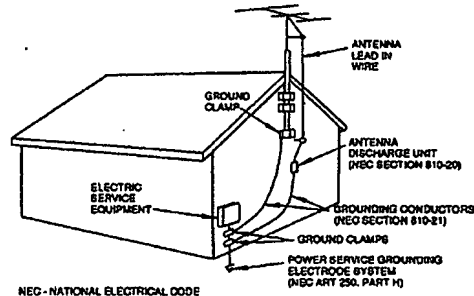
13) **Power-Cord Protection** — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

14) **Outdoor Antenna Grounding** — If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

### "Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Section 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Example of Antenna Grounding as per  
National Electrical Code, ANSI/NFPA 70



15) **Lightning** — For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

16) **Power Lines** — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17) **Overloading** — Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in risk of fire or electric shock.

18) **Object and Liquid Entry** — Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

19) **Servicing** — Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20) **Damage Requiring Service** — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a) when the power-supply cord or plug is damaged.
- b) if liquid has been spilled, or objects have fallen into the product.
- c) if the product has been exposed to rain or water.
- d) if the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e) if the product has been dropped or damaged in any way.
- f) when the product exhibits a distinct change in performance — this indicates a need for service.

21) **Replacement Parts** — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

22) **Safety Check** — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

23) **Wall or Ceiling Mounting** — The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

24) **Heat** — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

## Introduction

TASCAM M-08 is designed for live recording, public address, audio visual suites and all other situations where the combination of small size, high quality audio and rugged constructions is required. M-08 includes such features as :

- 4 mono inputs plus 4 stereo inputs
- 2 band EQ on all mono and stereo channel.
- 2 dedicated AUX sends. (ONE is PRE and other is POST).
- Mute on each input channel.
- PFL
- Dedicated 2 track input.
- 60 mm linear master fader.
- 4 MONO Effect Returns.
- 4 XLR MIC inputs.
- Channel insert on every MONO inputs.
- TRS balanced and RCA unbalanced stereo outputs.
- Stereo and AUX buss sub inputs.
- Phantom power supply.
- Optional Rackmount ear "RM-08".

**This manual :** This manual is not intended to cover all possibilities of the M-08 in a given, specific audio production system ; every system is a little different and, unfortunately, it is out of our reach to know every circumstance under which you use the M-08. But, to get the most out of your M-08, please take the time to read through this manual. Some time spent now will keep you from dragging in the middle of the mixing process.

**Use of Capital Letters :** In general, we use all upper case type to designate a particular jack, switch or control name or label (like MIC). All upper case type is also used to clearly distinguish an item from other similar but different ones even if that item is not actually so labeled on the mixer (like MASTER FADER, as distinct from CHANNEL LEVEL.)

## Table of Contents

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## For U. S. A.

### TO THE USER

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential area. This device generates and uses radio frequency energy and if not installed and use in accordance with the instructions, it may cause interference to radio or TV reception. If this unit does cause interference with TV or radio reception you can try to connect the interference by one or more of the following measures :

- a) Reorient or relocate the receiving antenna.
- b) Increase the separation between the equipment and the receiver.
- c) Plug the equipment into a different outlet so that it is not on the same circuit as the receiver. If necessary, consult the dealer or an experienced radio/TV technician for additional suggestions.

### CAUTION

Changes or modifications to this equipment not expressly approved by TEAC CORPORATION for compliance could void the user's authority to operate this equipment.

## Operations Guide

---

### Setup Tips

The following is only examples, but should contain enough information to get started.

#### CAUTION

Before anything else, make sure that all the units of your system are turned off, and that all the level adjustments are fully reduced. Otherwise plugging and unplugging of jacks may allow the speakers to produce a loud **explosive "pop"**, causing damage to the speakers or other equipment in the system.

Once all the connections are made and double checked, turn the mixer on first, and finally the power amps. Reverse the order when shutting the system down : the power amps first, and the mixer last.

- Don't connect both the XLR-type MIC and 1/4" LINE IN (BAL) jacks in the same channel (1-4) at one time. Disconnect one when the other is used.
- Don't connect effects returns to the STEREO BUSS input jack. You'll get feedback!

### Basics of Level Setting

#### Initial Input and Output Level Settings

1. First, make the following settings :

- Turn the level controls on the instruments all the way up.
- Turn the volume controls of your power amplifier all the way down.
- Turn the **TRIM** controls all the way to the left/LINE position.
- Turn the **EQ** and **PAN** controls to their center/off positions.
- Raise the **CHANNEL LEVELs** and the **MASTER FADER** to their nominal positions.

2. Play the instruments and slowly turn the **TRIM** controls to the right until the level meters read +14 on the loudest peaks, averaging around 0.

3. While all instruments are playing, use the faders to adjust the output mix level so that there may be no risk of "clipping" or distortion. Remember, the EQ knobs also affect the level feeding the **CHANNEL LEVELs** and **MASTER** fader.

4. While still playing, slowly bring up the volume control on the amplifier until you get the level you want.

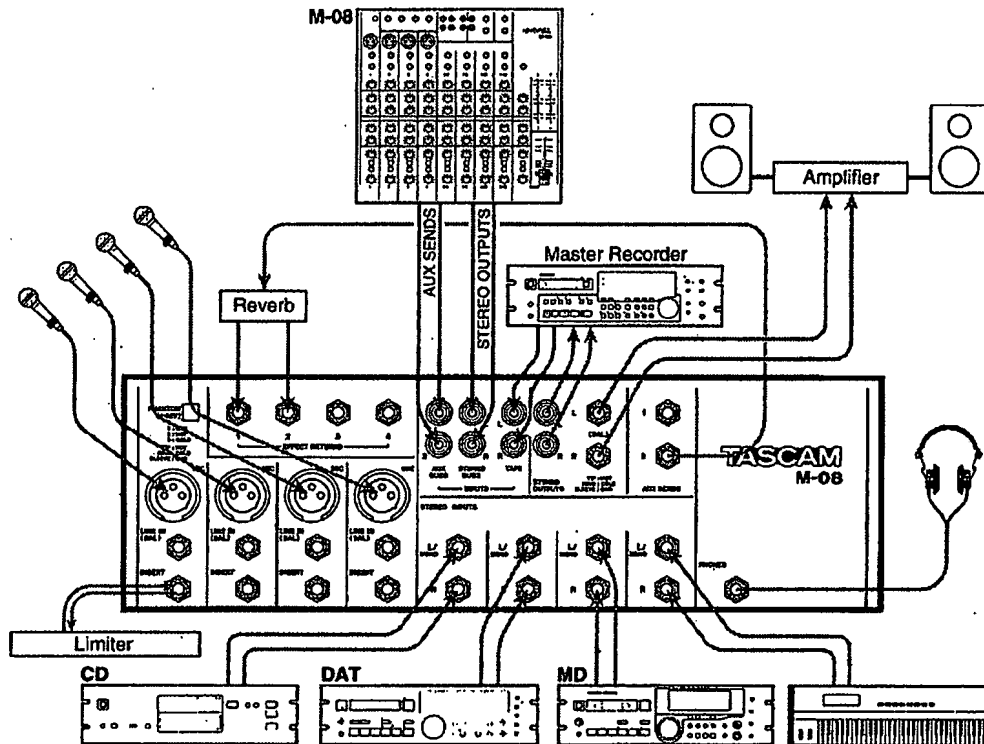
- We don't pretend the setting above are effective throughout the mixing process at all. You'll have to constantly monitor the operating levels and fine adjust these to meet ever changing requirements in each stage of each application.



## Hookup Examples

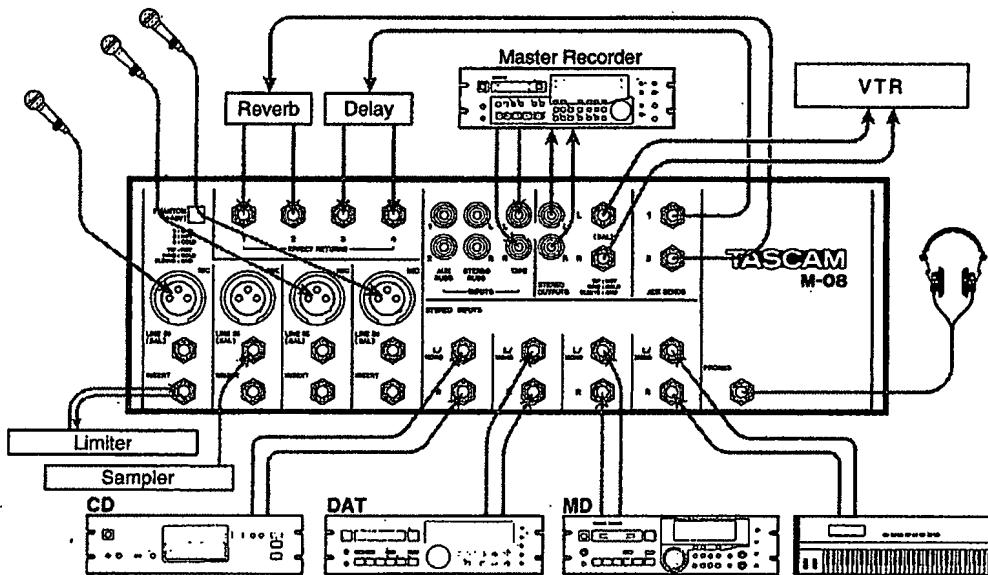
### Small system PA

E3



### Audio Visual System

E4



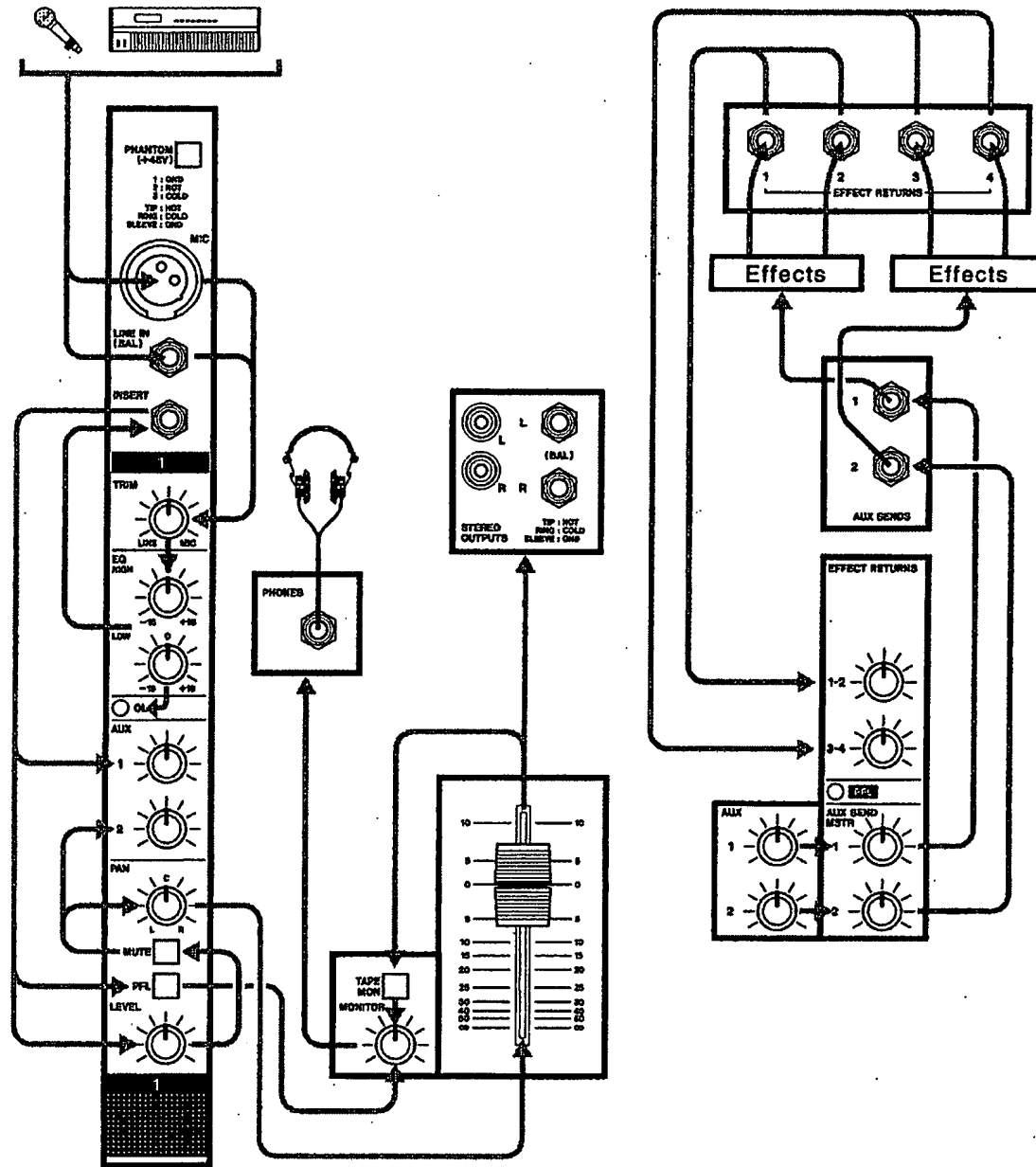
# Signal Flow

E5

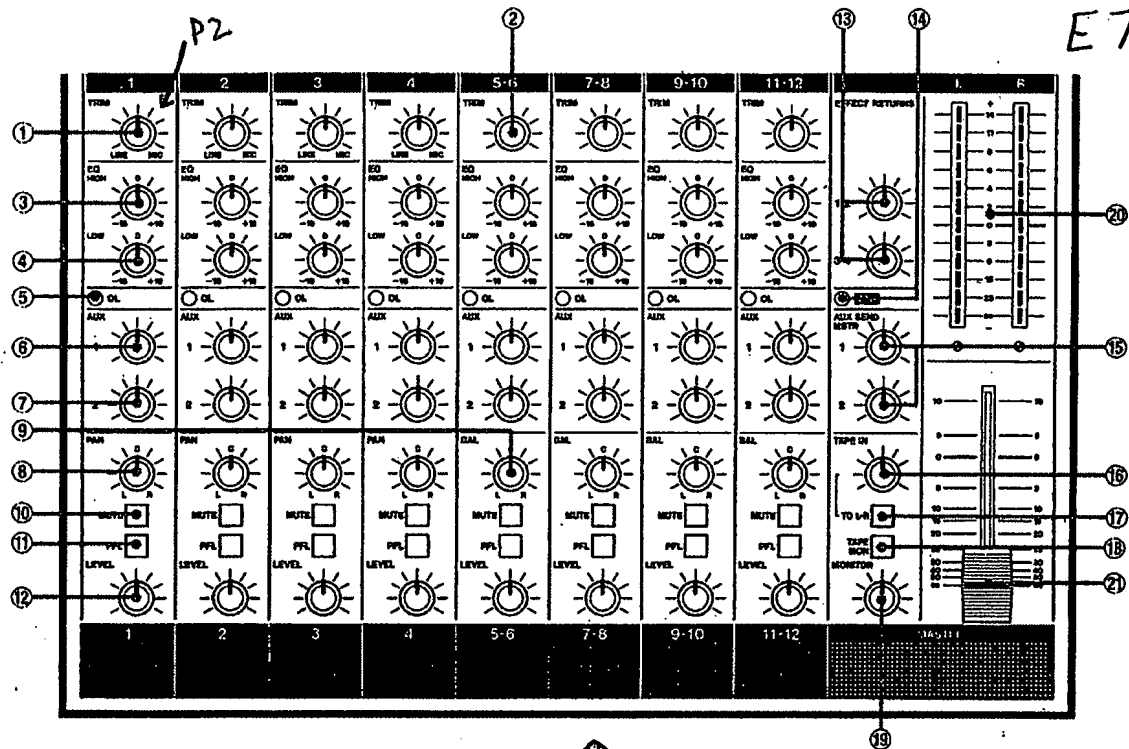
E6

Main Mix

Aux Sends/Effect Returns



## Features and Controls



### Control Section

#### ① TRIM (1-4)

This sets how much preamplification there is on the MIC and LINE IN (BAL) inputs. Turn the control to the left to lower the preamplification level, allowing the jack to accept line level sources or louder sound sources. Turn the control to the right when working with mic's or softer sound sources.

#### ② TRIM (5-12)

This sets how much preamplification there is on the STEREO INPUTS.

#### ③ EQ HIGH

Turning the HIGH control to the right emphasizes the brilliance or brightness of the signal. If the signal sounds too harsh or shrill turn the control to the left. The boost/cut amount is  $\pm 16\text{dB}$  at 12kHz.

#### ④ EQ LOW

Turning the LOW control make the signal sound deeper or thinner as turned to the right or to the left. The boost/cut amount is  $\pm 16\text{dB}$  at 80Hz.

#### ⑤ OL LED

This lights up when the input signal reaches 20 dB above nominal level.

#### ⑥ AUX 1

This knob gets signal from a point just before (PRE) the CHANNEL LEVEL control and controls how much signal will go to the AUX SEND MSTR 1 control.

PRE means that the aux mix will not be affected by changes to the CHANNEL LEVELs, and is useful as a "cue" or "foldback" mix (also called "stage monitor mix" in PA situations).

#### ⑦ AUX 2

This knob gets signal from a point after the CHANNEL LEVEL control and MUTE switch. It controls how much signal will go to the AUX SEND MSTR 2 control.

#### ⑧ PAN

This adjusts the level balance of the Channel signal.

⑨ **BAL**

This controls the relative level of the left and right signals from STEREO INPUTS to the stereo buss.

⑩ **MUTE**

Shuts down each channel signal going to the stereo and AUX 2 busses.

⑪ **PFL**

When depressed, this switch allows you to monitor in the headphone a pre-LEVEL control signal of each channel.

⑫ **CHANNEL LEVEL**

Use to adjust the level feeding each channel.

⑬ **EFFECT RETURNS 1-2/3-4**

Used to adjust the level of the EFFECT RETURNS on their way to the stereo buss.

⑭ **PFL LED**

This lights up if a PFL button is depressed on any channel.

⑮ **AUX SEND MSTR**

Used to adjust the level of the aux mix feeding the AUX SEND jacks.

⑯ **TAPE IN**

Used to adjust the level of the signal plugged into the TAPE INPUTS.

⑰ **To L-R**

When this switch is depressed, signal plugged into the TAPE INPUTS are sent to the stereo buss.

■ For optimum noise performance, do not press on this switch when no signal is plugged into the TAPE INPUTS.

⑱ **TAPE MON**

Used to select a signal to be sent to the PHONES jack.  
OFF : A post-MASTER fader signal is sent out of the PHONES jack.

ON : A post-TAPE IN control signal is sent out of the PHONES jack.

⑲ **MONITOR**

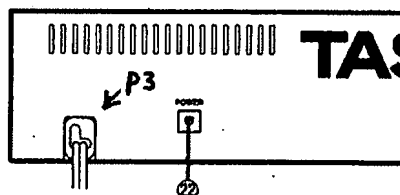
Used to adjust the output level at the PHONES jack.  
Maximum output is 100mW + 100mW ; be careful not to damage your ear.

⑳ **Level Meter**

Registers the level of the STEREO OUTPUTS.

㉑ **MASTER FADER**

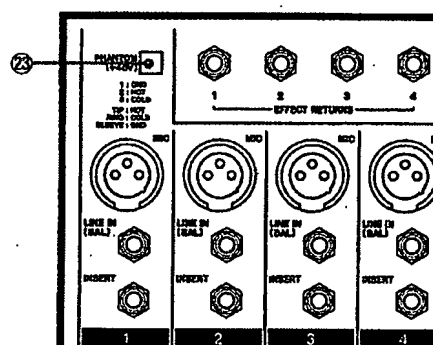
Used to adjust the output level at the STEREO OUTPUTS.



E 8

㉒ **POWER**

Turns on or off power.



E 9

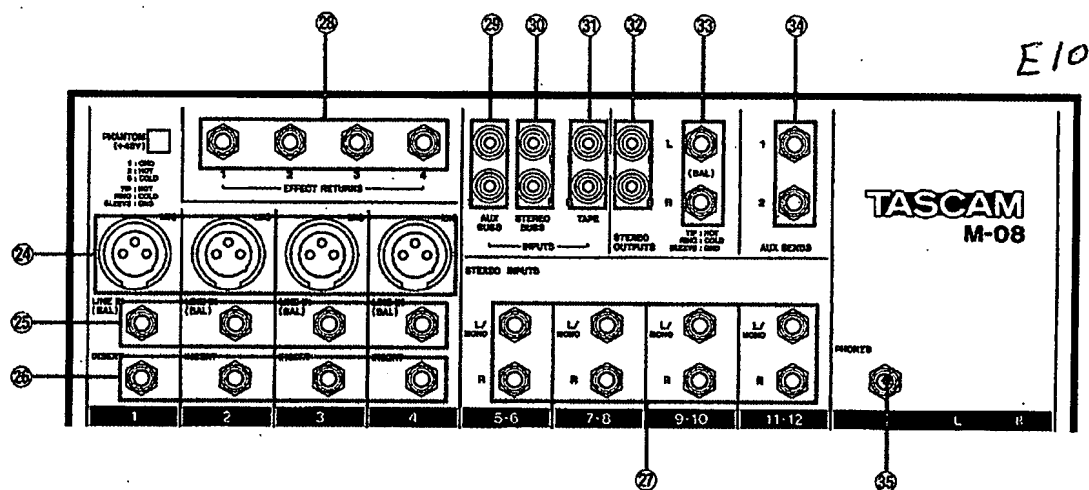
㉓ **PHANTOM (+48V)**

Switches on or off a +48v phantom power to mics.

"MICROPHONE CABLES AND MICROPHONES CONNECTION: TO PREVENT HAZARD OR DAMAGE, ENSURE THAT ONLY MICROPHONE CABLES AND MICROPHONES DESIGNED TO THE IEC 268-15A STANDARD ARE CONNECTED."

"CONNEXIONS DES MICROPHONES ET DE LEURS CABLES: POUR EVITER TOUT ENDOMMAGEMENT, S'ASSURER DE BRANCHER UNIQUEMENT DES MICROPHONES ET DES CABLES DE MICROPHONES CONÇUS SELON LA NORME IEC 268-15A."

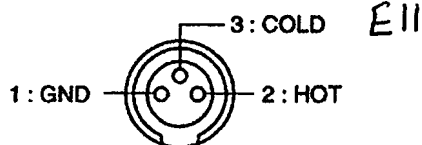
## Features and Controls



## Connections

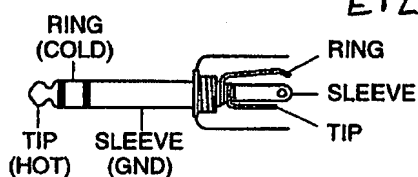
### 24 MIC

For connection to XLR-type balanced mic.



### 25 LINE IN (BAL)

For connection to the mics or balanced output of electronic instruments or audio equipment.

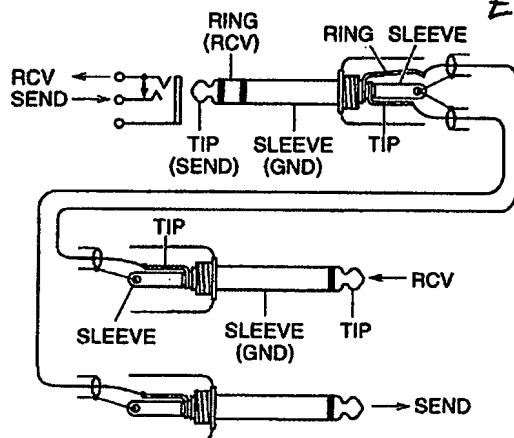


### CAUTION

Do NOT USE the XLR-type MIC input and the 1/4" MIC/LINE (BAL) input in the same channel at one time.  
Disconnect one when the other is used.

### 26 INSERT

Located after EQ and before CHANNEL LEVEL, they are used to send channel signals through effects devices. When nothing is connected to the jack, they are "normalled" (the send conductor is internally connected to the return conductor).



### 27 STEREO INPUTS

For connection to CD players, keyboards, rhythm machines, or others over a mono plug cable.

- When the signal is connected only to the L/MONO jack and leave its companion R jack empty, the signal is automatically taken into both the left and right of the stereo buss.
- When both the L and R jacks are connected, the signal into the L jack is sent to the stereo Left buss, and the signal into the R jack is sent to the stereo Right buss.

**28 EFFECT RETURNS**

The return signal from effects devices are connected here.

- When the return signal is connected only to jack 1 (or 3), the signal is sent to the stereo buss passing through the 1-2 (or 3-4) control.
- When both the 1 and 2 (or 3 and 4) jacks are connected, the return into the jack 1 (or 3) is to the stereo Left buss, and the return into the jack 2 (or 4) is to the stereo Right buss.

**29 AUX BUSS INPUTS**

For connection to external mixers or others. Mixes plugged here are directly sent to the aux buss.

**30 STEREO BUSS INPUTS**

For connection to external mixers or others. Mixes plugged here are directly sent to the stereo buss.

**31 TAPE INPUTS**

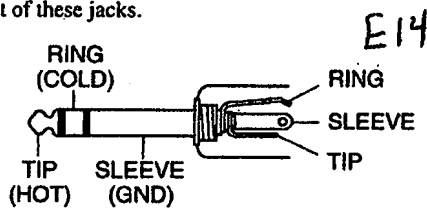
Here connected are the output of tape recorder or others.

**32 STEREO OUTPUTS (RCA : UNBAL)**

Post-MASTER FADER unbalanced stereo mix is sent out of these jacks.

**33 STEREO OUTPUTS (BAL) (TRS : BAL)**

Post-MASTER FADER balanced stereo mix is sent out of these jacks.



**34 AUX SENDS**

Here available are the aux mixes from the AUX SEND MSTR control.

**35 PHONES**

For connection to headphone.

## Specifications

---

### **MIC Input (1-4ch)** (XLR type balanced)

MIC Impedance : 200 $\Omega$  ~ 600 $\Omega$   
Input Impedance : 2.4k $\Omega$   
Nominal Level : -55dBm (1.4mV)  
Minimum Input Level (Trim MAX) : -59dBm (0.9mV)  
Maximum Input Level (Trim MIN) : -2dBm (0.6V)  
Trim Range : 57dB

### **LINE Input (1-4ch)** (TRS 1/4" jack, balanced)

Input Impedance : 10k $\Omega$   
Nominal Level : 0dBm (0.8mV)  
Minimum Input Level (Trim MAX) : -53dBm (1.7mV)  
Maximum Input Level (Trim MIN) : +4dBm (1.2V)  
Trim Range : 57dB

### **STEREO INPUT (5-12ch)** (1/4" jack, unbalanced)

Input Impedance: 10k $\Omega$   
Nominal Level: -2dBu (0.6V)  
Minimum Input Level: -12dBu (0.2V)

### **Equalizer** (2 band)

High (Shelving): 12kHz  $\pm$ 16dB  
Low (Shelving): 80Hz  $\pm$ 16dB

**Overload LED** : Set to light at 20dB above nominal

### **CH INSERT Send (1-4ch)** (TRS 1/4" jack, unbalanced)

Output Impedance: 100 $\Omega$   
Nominal Output Level: -2dBu (0.6V)  
Maximum Output Level: +19dBu (6.9V)

### **CH INSERT RCV (1-4ch)** (TRS 1/4" jack, unbalanced)

Input Impedance : 10k $\Omega$   
Nominal Input Level : -2dBu (0.6V)  
Maximum Input Level : +19dBu (6.9V)

### **EFFECT RETURN (1-4)** (TRS 1/4" jack, unbalanced)

Input Impedance : 10k $\Omega$   
Nominal Input Level : -2dBu (0.6V)  
Minimum Input Level : -12dBu (0.2V)

### **TAPE INPUT** (RCA, unbalanced)

Input Impedance : 10k $\Omega$   
Nominal Input Level : -10dBV (0.3V)  
Minimum Input Level : -20dBV (0.1V)

### **Buss Input** (RCA, unbalanced)

Input Impedance : 10k $\Omega$   
Nominal Input Level : -10dBV (0.3V)  
Maximum Input Level : +19dBV (6.9V)

### **AUX 1-2 SEND** (1/4" jack, unbalanced)

Output Impedance : 100 $\Omega$   
Nominal Output Level : -2dBu (0.6V)  
Maximum Output Level : +19dBu (6.9V)

### **STEREO OUTOUT** (TRS 1/4" jack, balanced)

Output Impedance : 75 $\Omega$   
Nominal Output Level : +4dBm (1.2V)  
Maximum Output Level : +26dBm (15.5V)

### **STEREO OUTOUT** (RCA, unbalanced)

Output Impedance : 100 $\Omega$   
Nominal Output Level : -10dBV (0.3V)  
Maximum Output Level : +19dBV (6.9V)

### **PHONES**

Load Impedance : 35 $\Omega$  stereo phone  
Maximum Output Level : 100mW + 100mW

**Meter** : 12 dots LED bar meter x 2

### **Signal To Noise Ratio** (DIN Audio / IHF A)

1 MIC to STEREO OUTOUT (150 $\Omega$  source) : 65dB / 68dB  
4 MIC to STEREO OUTOUT (150 $\Omega$  source) : 60dB / 63dB  
1 STEREO INPUT to STEREO OUTPUT : 75dB / 83dB  
4 STEREO INPUT to STEREO OUTPUT : 73dB / 80dB  
MASTER Fader minimum (all CH mute) : 88dB / 90dB  
MASTER Fader nominal (all CH mute) : 75dB / 83dB  
1 LINE to AUX SEND (150 $\Omega$  source) : 72dB / 80dB

### **THD**

#### **1 MIC to STEREO OUTPUT**

: Less than 0.03%  
: Less than 0.015% (1kHz)

(20Hz ~ 20kHz, Trim nominal, EQ flat, 20dB above nominal input level with 30kHz LPF connected)

#### **1 MIC to STEREO OUTPUT**

: Less than 0.025%  
: Less than 0.008% (1kHz)

(20Hz ~ 20kHz, Trim MIN, EQ flat, nominal input level with 30kHz LPF connected)

#### **1 Line (mono) to STEREO OUTPUT**

: Less than 0.025%  
: Less than 0.008% (1kHz)

(20Hz ~ 20kHz, Trim normal, EQ flat, 10dB above nominal input level with 30kHz LPF connected)

#### **1 Line (stereo) to STEREO OUTPUT**

: Less than 0.006%  
: Less than 0.004% (1kHz)

(20Hz ~ 20kHz, Trim nominal, EQ flat, 20dB above nominal input level with 30kHz LPF connected)

### **Frequency Response** (Nominal In / Out level)

#### **MIC/LINE to STEREO OUTPUT**

: 20Hz ~ 25kHz +0.0/-1.0dB

#### **PHONES** : 50Hz ~ 20kHz +0.0/-2.0dB

### **Crosstalk**

Fader attenuation (at 1kHz)

Input VR : Better than 80dB

MASTER Fader : Better than 90dB

STEREO OUTPUTS (at 1kHz) : Better than 67dB

Other Outputs (at 1kHz) : Better than 70dB

## Specifications

### Dimensions (W x H x D) :

325 mm x 90.1 mm x 311 mm  
12-13/16" x 3-9/16" x 12-1/4"

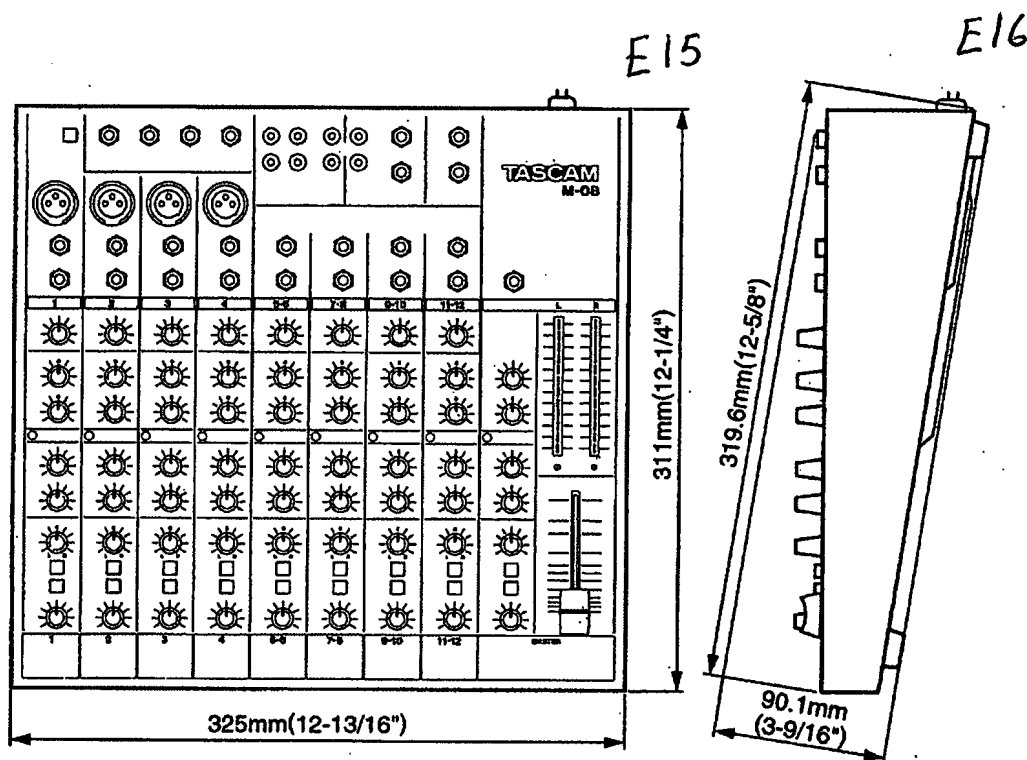
### Power Requirements :

USA / CANADA : 120 V AC, 60 Hz, 16 W  
EUROPE/U.K. : 230V AC, 50 Hz, 16W

Weight : 4.5kg (9.92 lbs.)

■ In these specifications : 0 dBV = 1.0 V, 0 dBm / dBu = 0.775 V, -2 dBu (0.617 V) = -4.2 dBV  
(0.316V for -10dBV rounded to 0.3V)

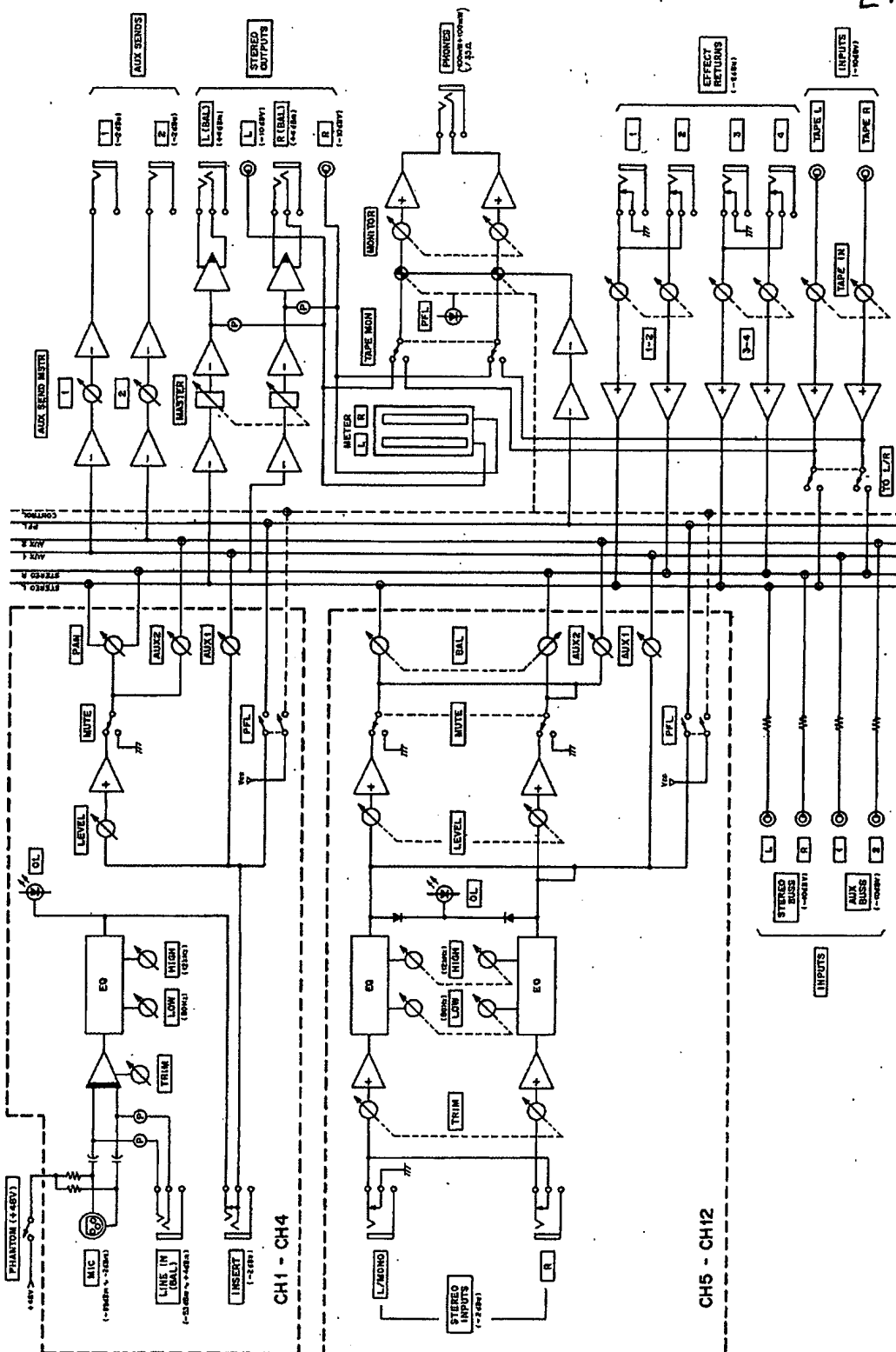
NOTE : Changes in specifications and features may be made without notice or obligation.





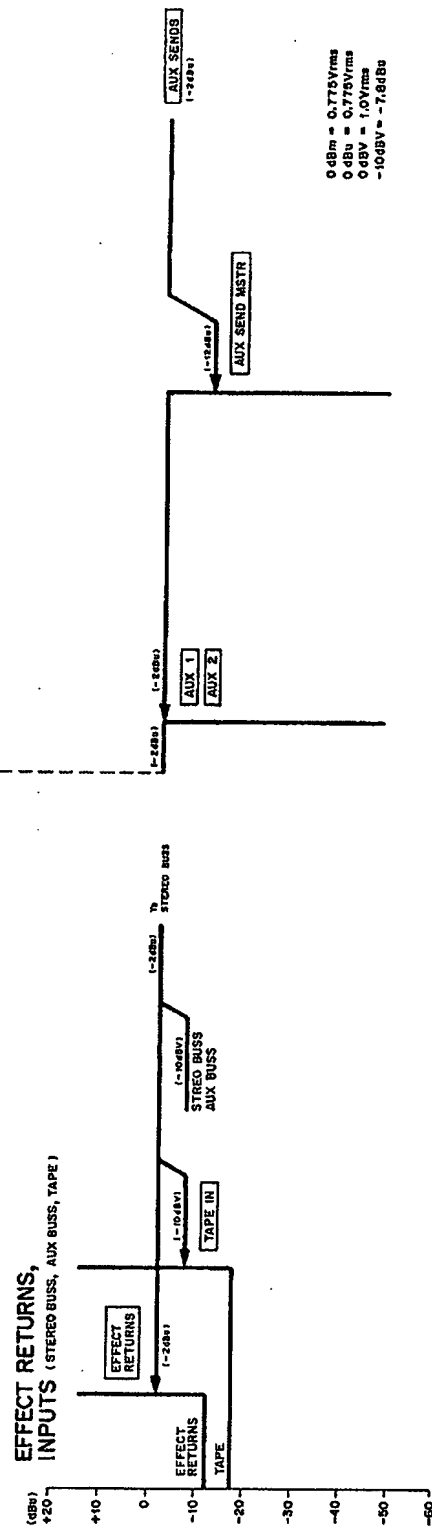
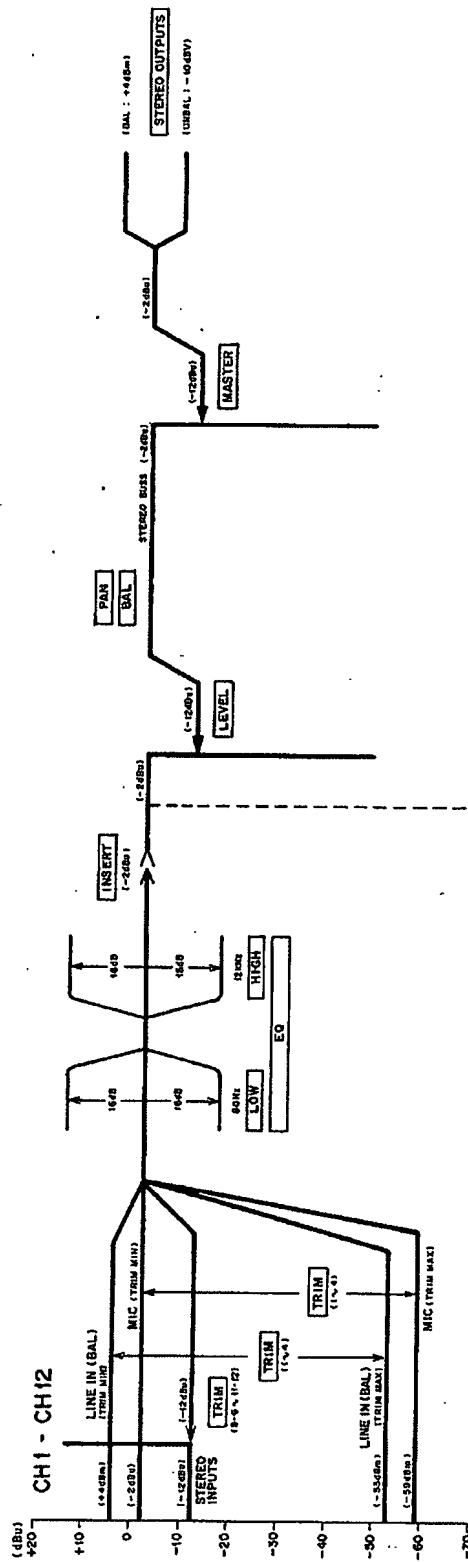
# Block Diagram

E17



# Level Diagram

E18



## Optional Accessories

### PB-32 Series Patch Bays

The PB-32 patch bay lets you bring the confusing cable ends to one single spot in your rack or next to your mixer, and get them under control. You can label inputs and outputs on the PB-32, and won't have to guess anymore at what you might be plugging in. A few cords can save endless hours of searching around on the floor behind your console and, as the whole process of patching is made simpler, you'll probably find more flexibility in your system setup.

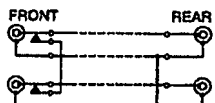
The PB-32 comes in four versions. The PB-32P is equipped with 1/4" only, the PB-32R with RCA jacks only, the PB-32H with 1/4" on one side and RCA jack on the other, and the PB-32W with 1/4" jacks for 6 channels and RCA jacks for the remaining 10 channels.

PB-32P



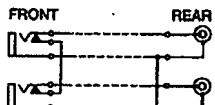
E19

PB-32R



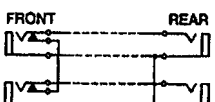
E20

PB-32H

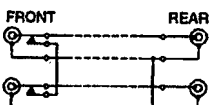


E21

PB-32W



E22

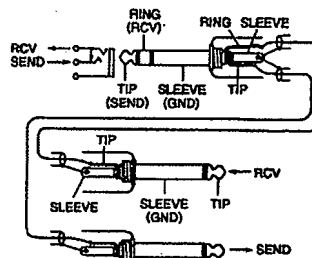


E23

### PW-2Y / PW-4Y Insertion Cable

The PW-2Y / PW-4Y is a connection cable that allows signal processing such as a graphic equalizer to be inserted at specific points of the signal path of the M-08. Its tip-ring-sleeve plug connects to the INSERT jack while its "Y'ed" end accommodates connection to the input and output terminals of the outboard effects devices being used.

Available in two length : 2m (PW-2Y) and 4m (PW-4Y)



E24

### RM-08 Rackmount Ear

### JC-T201 Plug Adapter

(RCA Phono to 1/4" Phono)

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#### TEAC FRANCE S.A.

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#### TEAC BELGIUM NV/SA

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#### TEAC NEDERLAND BV

Perkinsbaan 11, 3439 ND Nieuwegein, Nederland Phone: 03-402-30229

#### TEAC AUSTRALIA PTY., LTD A.C.N. 005 408 462

106 Bay Street, Port Melbourne, Victoria 3207, Australia Phone: (03) 646-1733

#### TEAC ITALIANA S.p.A.

Via C. Cantu 5, 20092 Cinisello Balsamo, Milano, Italy Phone: 02-66010500

Enter Web Address: 

All

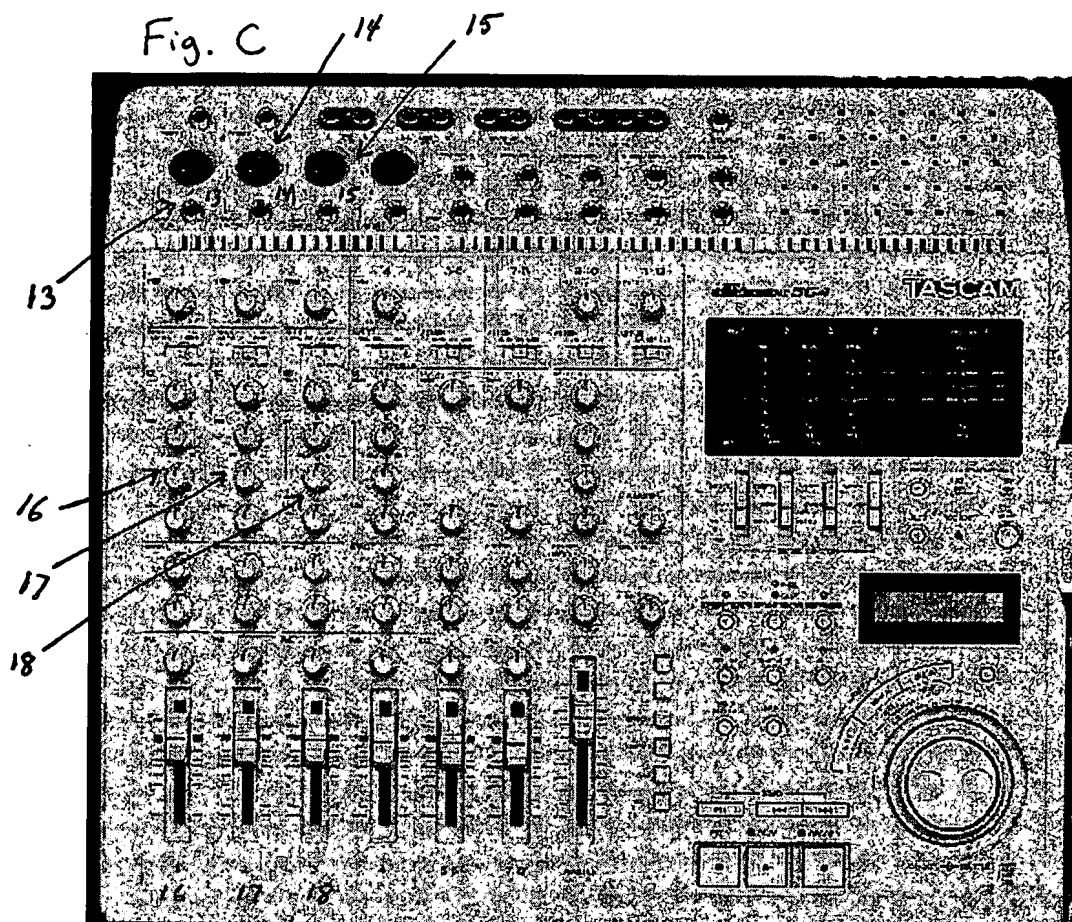
[Take Me Back](#)[Adv. Search](#) [Compare Arc](#)Searched for [http://www.minidisc.org/images/tascam\\_564\\_mid.gif](http://www.minidisc.org/images/tascam_564_mid.gif)**10 Results**

\* denotes when site was updated.

**Search Results for Jan 01, 1996 - Oct 26, 2007**

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
0	0	0	0	0	0	1 pages	0	2 pages	1 pages	5 pages
pages	pages	pages	pages	pages	pages		pages			
						<a href="#">Jun 06, 2002 *</a>		<a href="#">Feb 16, 2004</a>	* <a href="#">Nov 03, 2005</a>	<a href="#">Sep 08, 2006</a>
								<a href="#">Aug 08, 2004</a>		<a href="#">Sep 13, 2006</a>
										<a href="#">Sep 18, 2006</a>
										<a href="#">Nov 18, 2006</a>
										<a href="#">Dec 14, 2006</a>

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Enter Web Address: Searched for [http://www.tascam.com/pdf/M-08\\_manual.pdf](http://www.tascam.com/pdf/M-08_manual.pdf)

1 Results

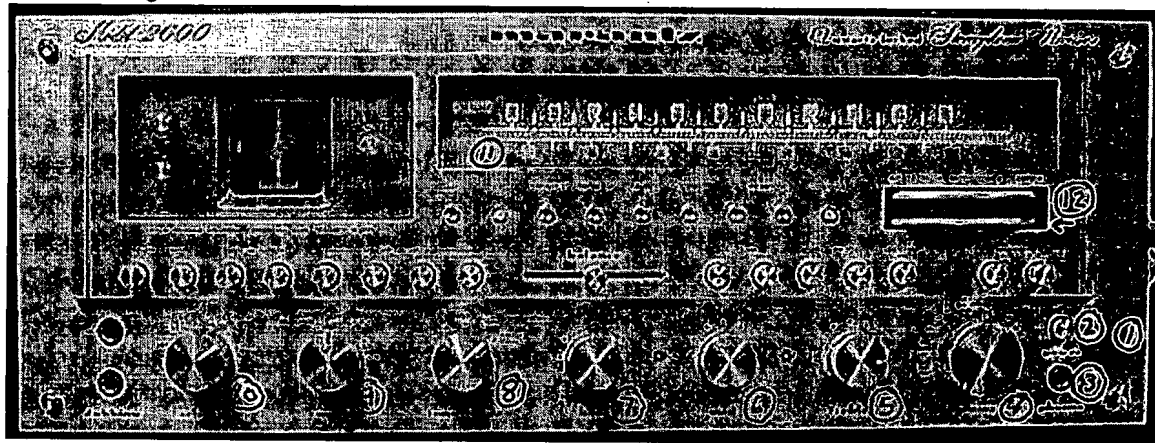
\* denotes when site was updated.

**Search Results for Jan 01, 1996 - Oct 26, 2007**

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
0	0	0	0	0	0	0	1 pages	0	0	0	0
pages	pages	pages	pages	pages	pages	pages		pages	pages	pages	pages

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Fig A.

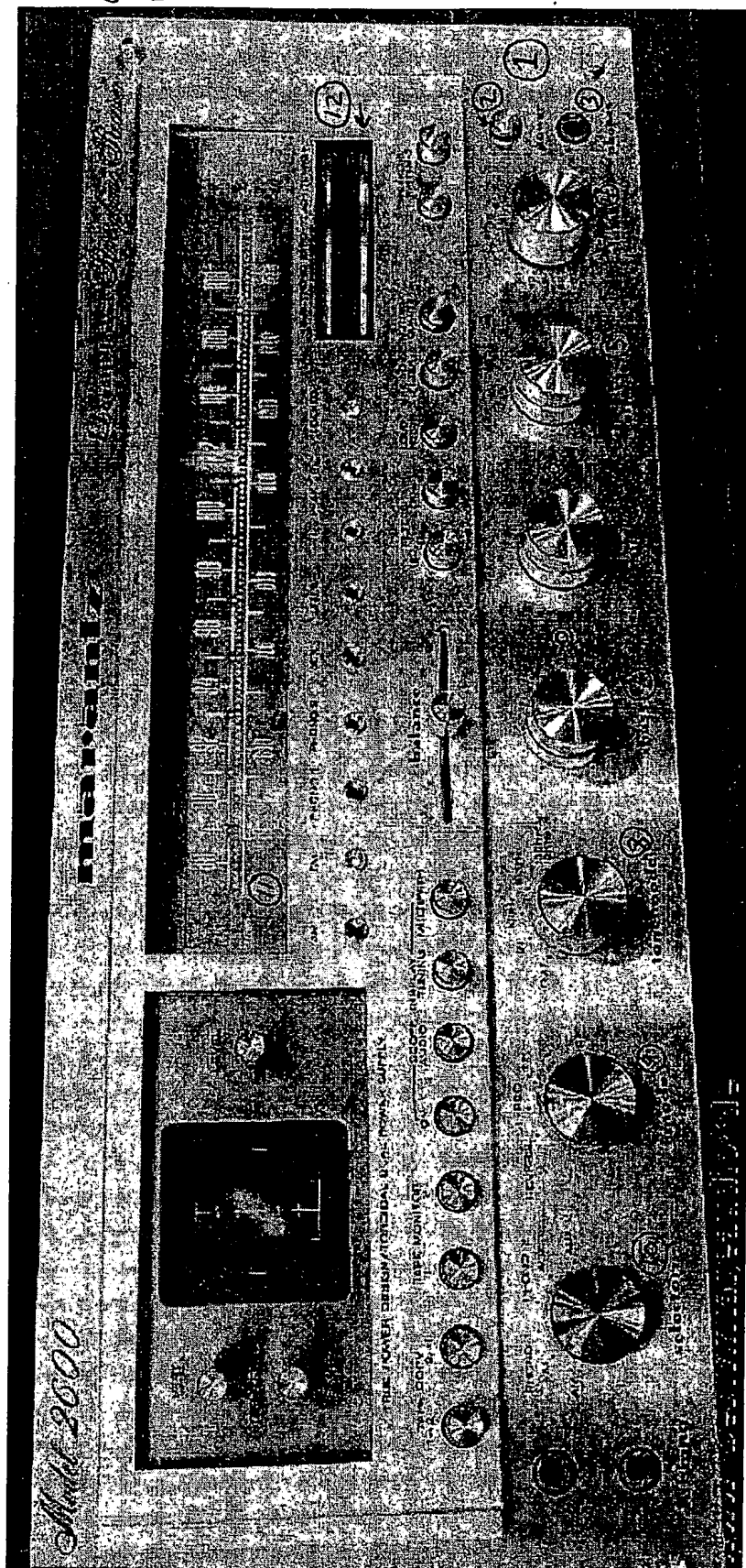


The figure shown was found on October 25, 2007 at the following url. It is provided to be a better quality picture of the front of the Marantz Model 2600 Stereo Receiver for exemplary purposes.

KB 10/26/2007

<http://stores.ebay.at/BestVintageAudio>

Fig. B







Enter Web Address:

[Adv. Search](#) [Compare Arc](#)Searched for [http://www.classic-audio.com/marantz/pics/2600\\_b.jpg](http://www.classic-audio.com/marantz/pics/2600_b.jpg)

5 Results

\* denotes when site was updated.

**Search Results for Jan 01, 1996 - Oct 25, 2007**

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
0	0	0	0	0	0	3 pages	0	0	1 pages	0	1 pages
pages	pages	pages	pages	pages	pages		pages	pages		pages	
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